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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,573	12/28/2000	Robert M. Zeidman	M-8637 US	8832
32605	7590	01/03/2005	EXAMINER	
MACPHERSON KWOK CHEN & HEID LLP			CRAIG, DWIN M	
1762 TECHNOLOGY DRIVE, SUITE 226			ART UNIT	
SAN JOSE, CA 95110			PAPER NUMBER	
			2123	

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,573

Applicant(s)

ZEIDMAN, ROBERT M.

Examiner

Dwin M Craig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-21 and 23-25 have been presented for reconsideration in view of Applicant's amended claim language and arguments. Claim 22 has been cancelled.

Response to Arguments

2. Applicant's arguments presented in the 3 September 2004 have been fully considered. The Examiner response is as follows.

2.1 Regarding the Applicant's response to the non-statutory double patenting rejections of Claims 1, 17, 18, 19 and 22.

The Examiner respectfully traverses Applicant's arguments and has not found Applicant's arguments or amended claim language to be persuasive.

The Examiner upholds the earlier non-statutory double patenting rejections of Claims 1, 17, 18, 19 and 21.

2.2 As regards to the Applicant's response to the 35 U.S.C. 103(a) rejections of Claims 1-25.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

The Examiner respectfully points out that Applicant's arguments are merely a recitation of the current claims language, with out any specific arguments pointing out which specific limitations are not being disclosed in the cited prior art references.

The Examiner upholds the earlier 35 U.S.C. 103(a) rejections of Claims 1-21 and 23-25.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3.1 Claims 1 and 19 are provisionally rejected under the judicially created doctrine of double patenting over **Claim 1** of copending Application No. 10/158,648. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Both Applications are claiming; connecting a simulated/emulated hardware peripheral device, running at a higher speed than the simulation, and receiving network packets through buffers to and from the simulated device. It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have modified the invention, as claimed in the

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instant Application to the limitations, as claimed in Independent Claim 1 of Application 10/158,648.

3.2 **Claims 1 and 19** are provisionally rejected under the judicially created doctrine of double patenting over **Claim 1** of copending Application No. 10/158,772. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Both Applications are claiming; connecting a simulated/emulated hardware peripheral device, running at a higher speed than the simulation, and receiving network packets through buffers to and from the simulated device. It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have modified the invention, as claimed in the instant Application to the limitations, as claimed in Independent Claim 1 of Application 10/158,772.

3.3 **Claims 1 and 19** are provisionally rejected under the judicially created doctrine of double patenting over **Claim 1** of copending Application No. 10/044,217. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

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Both Applications are claiming; connecting a simulated/emulated hardware peripheral device, running at a higher speed than the simulation, and receiving network packets through buffers to and from the simulated device. It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have modified the invention, as claimed in the instant Application to the limitations, as claimed in Independent Claim 1 of Application 10/044,217.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Independent Claims 1 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Profit, Jr. U.S. Patent 5,911,059 in view of Hoang U.S. Patent 6,067,585 and in further view of Chang et al. U.S. Patent 5,280,481.

4.1 As regards independent Claims 1 and 19 and dependent Claim 21 the Profit Jr. reference discloses emulation of an electronic device (Figure 5 and Col. 3 Lines 65-67 Col. 4

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Lines 1-41) and receiving network data packets, transmitting network data packets and receiving and transmitting data packets to and from the emulated electronic device (**Figures 6 & 7, item 102, Col. 7 Lines 14-48**). As regards the limitation of a specified bit-rate, that limitation is inherent to the an electronic device emulating a bridge.

However, the *Profit Jr.* reference does not expressly disclose a network operating at a speed higher than the emulated device.

The *Profit Jr.* reference discloses that there is a speed/performance problem with hardware simulators in regards to the speed at which these simulations operate (**Col. 2 Lines 36-55**). Thus, an artisan of ordinary skill would have been motivated to search the related art to find a way to attach an emulated network device to a network in such a manner so as to allow the emulated device to perform the emulation and not be overwhelmed by the arrival and transmission of network frames that arriving at a speed greater than the emulation system can support. In the network interface controller art the *Hoang* reference discloses a method of controlling the rate at which network frames travel across different network segments and/or devices and therefore provides a way for a network to operate at a speed higher than the emulated device (**Col. 2 Lines 18-56**).

Thus, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to have combined the methods of the *Profit Jr.* reference with the methods of the *Hoang* reference because, the idea of emulating a Local Area Network transmission is well known in the art (**Chang et al. Col. 3 Lines 53-65, Col. 4 Lines 13-26**), and an artisan of ordinary skill would have known to slow down the stream of data packets from the network

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going into the electronic device emulation because of the speed performance problems of emulators as disclosed in the *Profit Jr.* reference (**Profit Jr. Col. 2 Lines 36-55**).

4.2 As regards dependent **Claim 21** the *Profit, Jr.* reference discloses a bi-directional interface card (**Figure 6 Item 102**).

5. Dependent **Claims 2-7, 11-16 and 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Profit, Jr. U.S. Patent 5,911,059** in view of **Hoang U.S. Patent 6,067,585** and in further view of **Chang et al. U.S. Patent 5,280,481** and in further view of **Kuo et al. U.S. Patent 6,061,767**.

5.1 As regards independent **Claims 1 and 19** see paragraph **4.1** above.

5.2 As regards dependent **Claims 2-7, 11-16 and 23-24**, *which are directed towards managing transmit and receive buffers for an emulated network device*, the *Profit, Jr.* reference does not expressly disclose Media Access Controller Buffer Management.

The *Kuo et al.* reference discloses Media Access Controller Buffer Management (**Figures 1A & 1B, Col. 1 Lines 14-51, Col. 2 Lines 16-35, Col. 4 Lines 1-7**).

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have combined the teachings of the *Profit, Jr.* reference with the teachings of the *Kuo et al.* reference because, when emulating a network device there is a need to provide transmit and receive buffers in order to have an accurate emulation and to have a place to store the incoming and outgoing network frames.

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6. Dependent **Claims 8, 9 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Profit, Jr. U.S. Patent 5,911,059** in view of **Hoang U.S. Patent 6,067,585** and in further view of **Chang et al. U.S. Patent 5,280,481** and in further view of **Kuo et al. U.S. Patent 6,061,767** and in further view of **Schwaller et al. U.S. Patent 5,383,919**.

6.1 As regards independent **Claim 1** see paragraph 4.1 above.

6.2 As regards dependent **Claim 7** see paragraph 5.2 above.

6.3 As regards dependent **Claims 8, 9 and 10** the *Profit, Jr.* reference does not expressly disclose recording performance measurements of network frames.

The *Schwaller et al.* reference discloses recording performance measurements of network frames (**Figure 5A Items 76 & 78 and Figure 9A, Col. 4 Lines 67-68, Col. 5 Lines 1-10**).

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have combined the teachings of the *Profit, Jr.* reference with the teachings of the *Schwaller et al.* reference because, when designing an electronic device that is used to process network frames, a method of measuring network performance is required to determining if the emulated network device is performing correctly.

7. Dependent **Claims 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Profit, Jr. U.S. Patent 5,911,059** in view of **Hoang U.S. Patent 6,067,585** and in further view of **Chang et al. U.S. Patent 5,280,481** and in further view of **Aronson et al. U.S. Patent 6,128,673**.

7.1 As regards independent **Claim 19** see paragraph 4.1 above.

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7.2 As regards dependent **Claims 21** the *Profit, Jr.* reference does not expressly disclose a parallel port card.

The *Aronson et al.* reference discloses a parallel port card (**Col. 2 Lines 37-55**).

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to have used a parallel port card because an artisan of ordinary skill would be able to program said card with ease and therefore be able to access data frames going through the emulated electronic device without have to write a large amount of complex software.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1-21 and 23-25** are rejected under 35 U.S.C. 102(b) as being anticipated by “**On the Design of a High-Performance ATM Bridge**” by Wen-Tsuen Chen, Yao-Wen Deng, Chuan-Pwu Wang, Nen-Fu Haung, Hwa-Chun Lin, Chung-Chin Lu and Ruay-Chiung Chang, hereafter referred to as the *Wen-Tsuen et al.* reference.

8.1 As regards independent **Claims 1 and 19** the *Wen-Tsuen et al.* reference discloses emulation of a bridge (**Abstract**), and bit-rate (**page 210**).

8.2 As regards dependent **Claims 2-18, 20, 21 and 23-25** see (**pages 207-213**).

Conclusion

9. **Claims 1-21 and 22-25** have been presented for reconsideration in view of Applicant's amended claim language and arguments. **Claims 1-21 and 22-25** have been rejected.

9.1 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

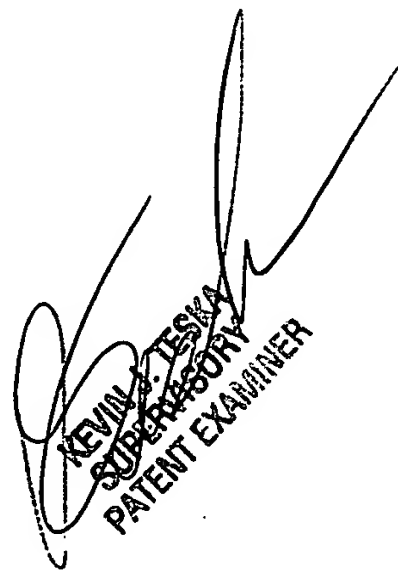
9.2 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwain M Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on (571)272-3716. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC


KEVIN A. TESKA
SUPERVISOR
PATENT EXAMINER